

5. (Amended) An isolated nucleic acid molecule which encodes a naturally occurring allelic variant of a *Corynebacterium glutamicum* polypeptide comprising the amino acid sequence of SEQ ID NO:2, wherein the nucleic acid molecule hybridizes to the complement of a nucleic acid molecule consisting of SEQ ID NO:1 in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 50-65°C, and wherein said nucleic acid molecule encodes a polypeptide having 6-phosphogluconolactonase activity.

6. (Amended) An isolated nucleic acid molecule comprising a nucleotide sequence which has at least 90% identity with the nucleotide sequence of SEQ ID NO:1, wherein said nucleic acid molecule encodes a polypeptide having 6-phosphogluconolactonase activity, or the complement thereof.

(3)

7. (Amended) An isolated nucleic acid molecule comprising a fragment of at least 15 contiguous nucleotides of the nucleotide sequence of SEQ ID NO:1, or the complement thereof.

8. (Amended) An isolated nucleic acid molecule which hybridizes to the nucleic acid molecule of any one of claims 1 and 4-7 in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 50-65°C.

(4)

9. (Amended) An isolated nucleic acid molecule comprising the nucleic acid molecule of any one of claims 1 and 4-7 and a nucleotide sequence encoding a heterologous polypeptide.

(5)

15. (Amended) The host cell of claim 12, wherein the expression of said nucleic acid molecule results in the production of a fine chemical from said cell.

(6)

25. (Amended) A method for producing a fine chemical, comprising culturing a cell containing a vector of claim 11, such that the fine chemical is produced.

(7)

29. (Amended) The method of claim 25, wherein said cell is selected from the group consisting of: *Corynebacterium glutamicum*, *Corynebacterium herculis*, *Corynebacterium lilium*, *Corynebacterium acetoacidophilum*, *Corynebacterium*

acetoglutamicum, Corynebacterium acetophilum, Corynebacterium ammoniagenes, Corynebacterium fujikense, Corynebacterium nitrilophilus, Brevibacterium ammoniagenes, Brevibacterium flavum, Brevibacterium healii, Brevibacterium ketoglutamicum, Brevibacterium ketosoreductum, Brevibacterium linens, Brevibacterium parafinoliticum, and those strains set forth in Table 3.

C7
cont
C8

34. (Amended) A method for producing a fine chemical, comprising culturing a cell whose genomic DNA has been altered by the inclusion of a nucleic acid molecule of any one of claims 1 and 4-9.

C9

36. (Amended) A host cell comprising the nucleic acid molecule of SEQ ID NO:1, or the complement thereof, wherein the nucleic acid molecule is disrupted, and wherein said nucleic acid molecule encodes a polypeptide having 6-phosphogluconolactonase activity.

37. (Amended) A host cell comprising the nucleic acid molecule of SEQ ID NO:1, or the complement thereof, wherein the nucleic acid molecule comprises one or more nucleic acid modifications, and wherein said nucleic acid molecule encodes a polypeptide having 6-phosphogluconolactonase activity.